

American Academy of Arts and Sciences

Robert Weisenmiller, Chair, California Energy Commission

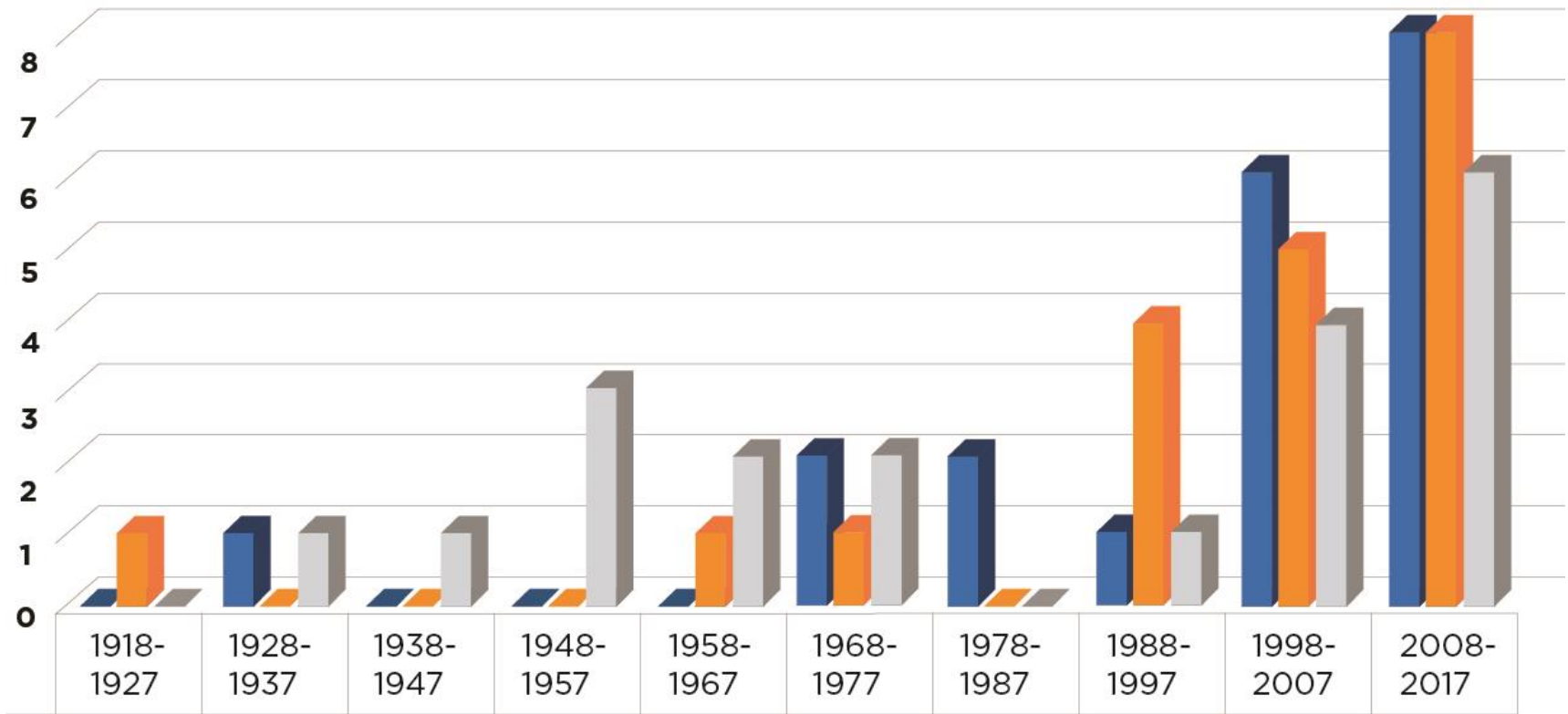
New Breakthroughs in Research

March 1, 2018





Climate Adaptation: Preparing for Future Fires in California

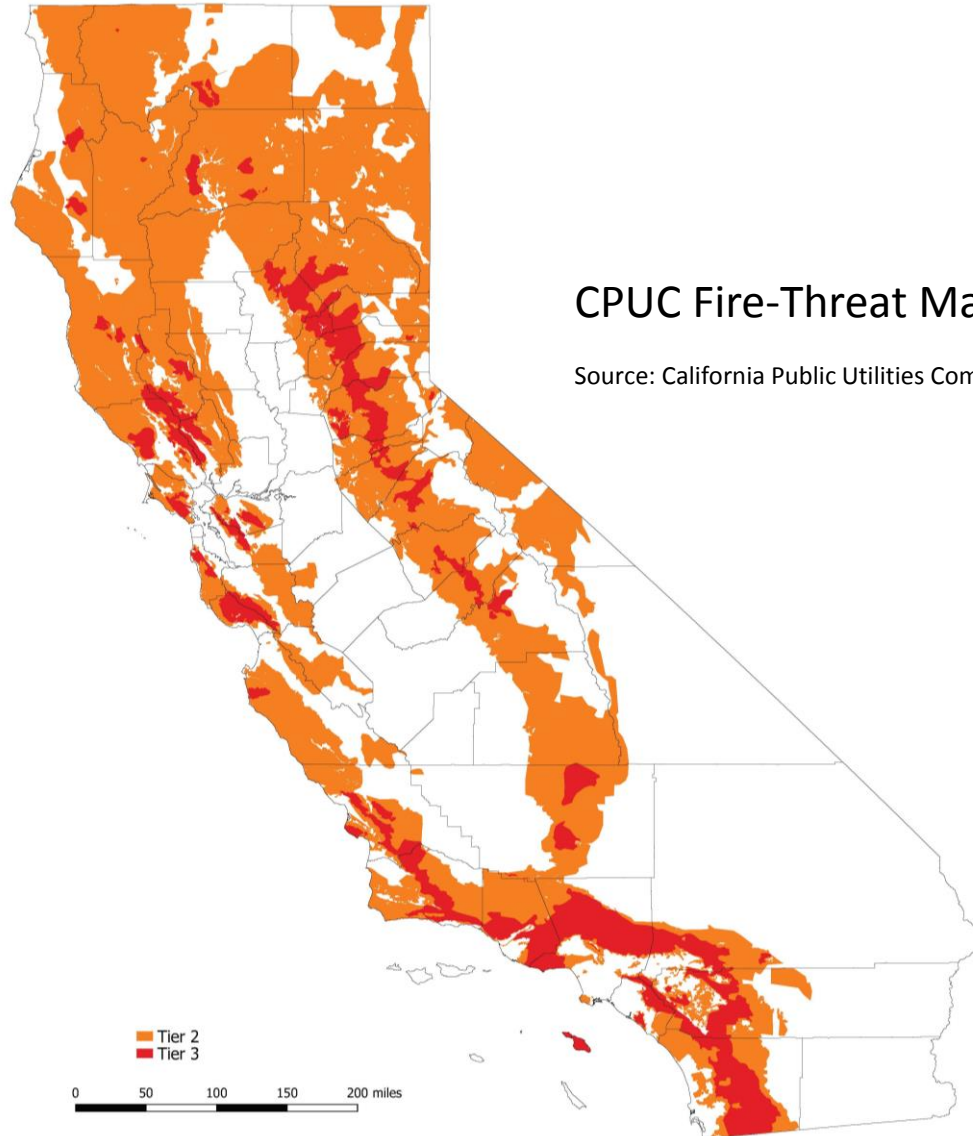


Source: Cal Fire





Climate Adaptation: Preparing for Future Fires in California

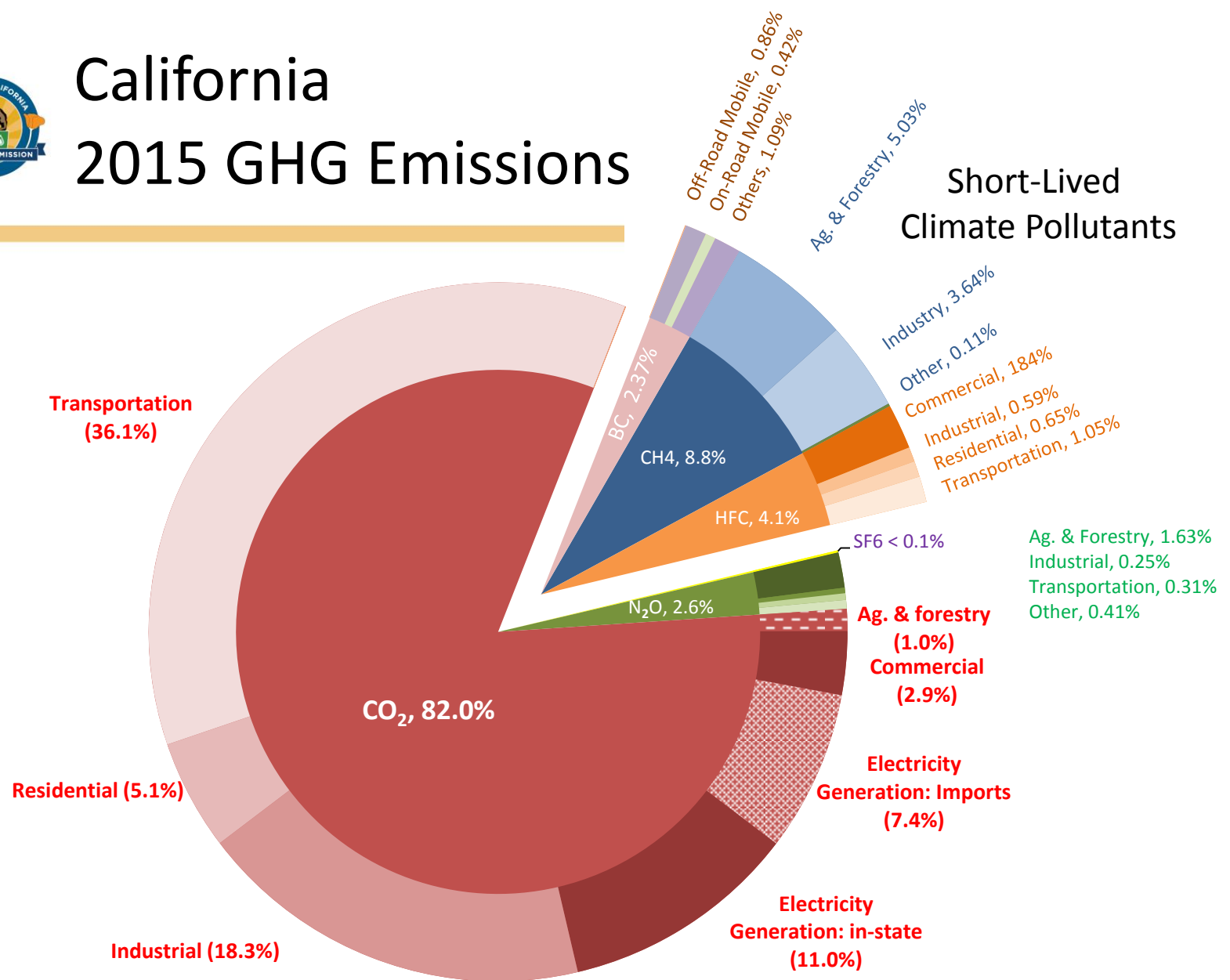


CPUC Fire-Threat Map

Source: California Public Utilities Commission



California 2015 GHG Emissions



Source: California Energy Commission staff using data from CARB's 2017 Greenhouse Gas Emissions Inventory of 2015 emissions. Black carbon emissions data are from 2013, the most recent data available. The transportation sector is 36.2 percent of total when including black carbon and 38.5 percent when black carbon is not included.



Innovation: Priming Electricity System's Transformation

Zero Net Energy Communities



Energy Storage



Higher Mix of Renewable Energy Integration



Renewable Forecasting & Modeling

Plug-In Electric Vehicles





Innovation: Projects in Disadvantaged Communities/Low Income

Customer Centric Retrofits in Ontario



ZNE Multifamily Evaluation-
Cloverdale and Calistoga



Smart Ceiling
Fans with
Communicating
T-Stats

Customer Centric Retrofits in
Fresno



Affordable ZNE Approaches with
Habitat for Humanity